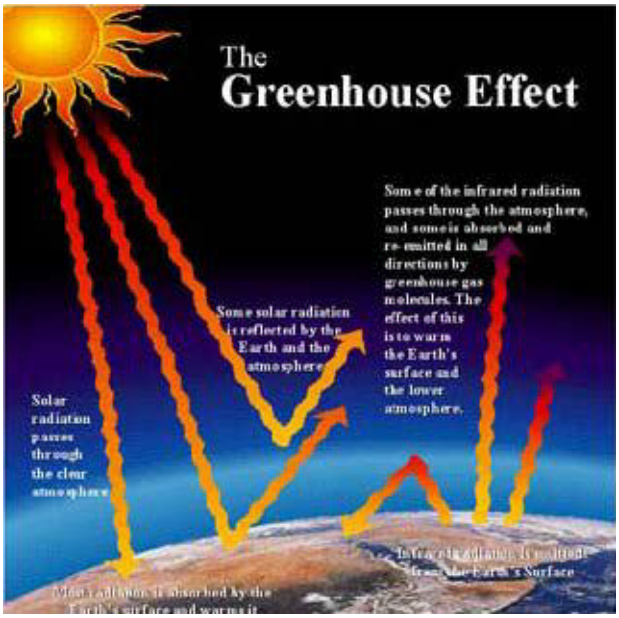
# Earth's Atmosphere



"The Earth is warming up! The ice caps will melt causing the oceaans to rise! The plants will die causing the extinction of the HUMAN RACE!!"

With all of the news stories about global warming lately, many people have a negative view of the greenhouse effect. The greenhouse effect isn't a bad thing. It keeps the earth warm enough for us to live here. Without the greenhouse effect, the earth would be a cold planet and would not be able to support life. Gases like carbon dioxide and methane let the sun's radiation into our atmosphere, but don't let the heat that is radiated back from the earth's surface out of the atmosphere into space. This is similar to how an actual greenhouse keeps the plants inside warm, giving the effect its name.



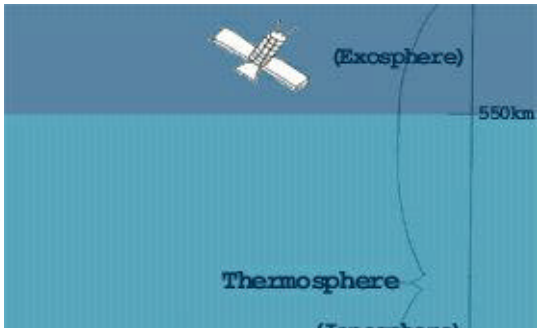

Global warming is the affect of the rising amount of greenhouse gases in our atmosphere. The more gases that are released into the atmosphere, the more the temperatures will rise. What is causing the increase in the levels of greenhouse gases? We are. Humans have been adding these gases to the atmosphere in several different ways.

Many of the activities that we do every day contribute to global warming. Turning on the television, driving a car, drying hair, and using the air conditioner all use energy. This energy usually comes from burning fossil fuels like natural gas, petroleum and coal. Burning these fuels releases carbon which combines with oxygen and increases the amount of carbon dioxide in our the atmosphere.

Also, many third-world countries are cutting down forests to make room for people, farming, and raising cattle. This mass removal of trees is called deforestation. Trees release oxygen in to the atmosphere and take carbon dioxide from the atmosphere. The fewer trees there are, the more carbon dioxide stays in the air. When the trees are cut down, they are usually burned which releases even more carbon into the air.

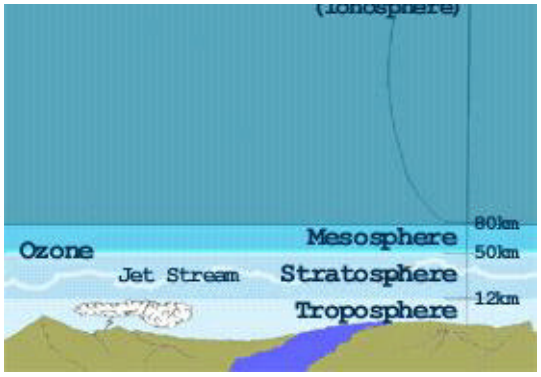
**How can we help?**

How many times have you left the room with the lights on, the television still going, or the radio, computer, or other appliances still running? We can conserve energy by simply being more conscious of the way we use energy. Turning off electrical appliances when they are not in use, carpooling and reducing the overall amount of fossil fuels we burn will be a big help. Planting trees and other vegetation will also help reduce the levels of greenhouse gases!




The atmosphere is divided into sections form crust up as follows: Troposphere, stratosphere, mesosphere, thermosphere, Ionosphere, exosphere. The Troposphere is the area we are most familiar with. This layer contains the majority of earths weather. This layer consists of approximately 78% nitrogen and 21% oxygen The remaining 1% is all other gases. These persents may vary due to pollutants in the air. The Stratosphere Contains the jet stream and ozone layer. Many of the commercial jets fly in or near this layer. The ozone layer absorbs most of the harmful ultraviolet rays and helps protect us. Ozone holes do exist and have been linked to higher skin cancer rates in Australia. Other areas also have holes. many are over large cities. The mesosphere

this area is where meteoroids burn up and leave a streak in the night sky. (falling stars or shooting stars) The Theromsphere includes in it both the Ionosphere and the Exosphere. The Ionosphere reflects radio waves back to the earth. The ions and dust particles also create a fabulous light show known as the aurora borealis sometimes called the northern lights. The Exosphere is where we often term as space, it's that area that holds the satellites that allow us to communicate by way of TV and other means. How would you like to do without any one of these layers? What might occur of we did not have all the layers? What might be the result if we lost the stratosphere? Can we do without any one of these layers?



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